OIPE
APR 16 2002
JC32
PATENT & TRADEMARK OFFICE

SEQUENCE LISTING

RECEIVED
APR 19 2002
TECH CENTER 1600/2900

Sub E1

<110> Van Broeckhoven, Christine
      Raeymaekers, Peter
      Del-Favero, Jurgen

<120> MOOD DISORDER GENE

<130> B0192/7019

<140> U.S. 09/581,500
<141> 2000-11-14

<150> GB 9726804.9
<151> 1997-12-18

<150> PCT/EP98/08543
<151> 1998-12-17

<160> 23

<170> PatentIn Ver. 2.0

<210> 1
<211> 167
<212> DNA
<213> Homo sapiens

<400> 1
```
gtctttattt catataacta tgctctgatc tttgttactt tctcctttta actcagttta 60
agctttattc ttattttcca gctgctgaag gtatatagtt aggttgttta ttggatacca 120
ttctttcccg ttaatgtcag tggttactgc tatcaatgta gcagtta              167
```

<210> 2
<211> 122
<212> DNA
<213> Homo sapiens

<400> 2
```
ataaggtata ttatttgtgt cgtgagttaa gaaatcatta ataactattt tcagaatgac 60
aaatgtcatt atatgttgta aaaaagataa atacgtgaaa ttatgaggtt aagaaaagtt 120
ta                                                                122
```

<210> 3
<211> 154
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (109)..(109)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (134)..(134)
<223> n = a, c, t, or g

<400> 3
```
acataaaatg tcgctcaaaa acaattatgt gtgtctacac atatgggaaa gcaggaaaca 60
```

```
aatttgttta caacatacat tacttttgtt ttttaggcaa gataaaatnt cctacctcca 120
aaaccaccag cacngtccgc aataactata catc                              154

<210> 4
<211> 301
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (217)..(217)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (298)..(298)
<223> n = a, c, t, or g

<400> 4
aatatcattc ttcacccacg ttatacataa gagaccagaa tgtgatattg tcatctcaca 60
tggaaaaatc tgctgtgatc agttcctgaa gcttgctgtg atcctccctt aggaaagtag 120
aaaaatcttt ttgaaacact ttattctaca atcaatgaaa attaggtgaa gctacagaag 180
ccagaaatta ctctaagatt agacaattat ttaagangac caattgtctt tggtcttctt 240
ctgaagggtc tgactaccct cctccaaaga attcactggc cgtcgtttta caacgtcntg 300
a                                                                 301

<210> 5
<211> 191
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (11)..(11)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (17)..(17)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (62)..(62)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (162)..(162)
<223> n = a, c, t, or g


<400> 5
ggagggtgtt ntcacanaag tctggggtgc gctgtgttgt tcattgtaaa aaccctttgg 60
ancatctggg aatgtgctgc cccacatgtc caggtaacgt tctcaggaag gggaggctgg 120
aaatctctgt gtgttcttac aggaatgcat gaaatctccc anccccctctt gttggaaatt 180
tccctcactt t                                                      191

<210> 6
<211> 253
```

<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (7)..(7)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (12)..(12)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (217)..(217)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (250)..(250)
<223> n = a, c, t, or g

<400> 6
cttctcnatg antggacaaa tgtcattggg tcagcatgag gcacagctta ccagttcaga 60
ttccagtagc tgaggaacaa atcttaactc caaaaataag taattgcgtc actttggagg 120
aattatttga ccttttcata actttgacat cacaacaatg agggtgaagt tagtaaaata 180
aatgattatt atgaggataa aatgagaaaa tgaattnagt gcttaagaca atgcttggta 240
actagttaan ccg 253

<210> 7
<211> 153
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (4)..(4)
<223> n = a, c, t, or g

<400> 7
ggtntttcac ttggttggtt aacattactt ctaagttttt tattgttttt tatgctattg 60
ctaatgggat tgctttctta atttattttt tccaatagct tgttgttagt ttatatcaaa 120
tgcaactgtt tttctatgca aattatgttt cct 153

<210> 8
<211> 238
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (130)..(130)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (141)..(141)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (176)..(176)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (235)..(235)
<223> n = a, c, t, or g

<400> 8
ttggtggtgc cctaggtttg gcaattataa ataaagctgc tacaaacatt catgtgcagg 60
tctccgtgtg gacataattt tccagttcat ttgggtaaaa cccaagggag cacaactgtt 120
ggatcctatn ataaaaatat ntctcgtttc atttaaaaaa cctgggaaac tatctnccca 180
cagtggctgt cccttttgt atccccacca acaatgttgg aaagcctatt gccancat 238

<210> 9
<211> 182
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (5)..(5)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (72)..(72)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (86)..(86)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (106)..(106)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (130)..(130)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (145)..(145)
<223> n = a, c, t, or g

<400> 9
catgnctcac agtgttctga ggctgctctg gacatgcaat cttgcatgct tttgtcatga 60
caggtcttaa anagtttatc agcttnctca aatagctgaa tgacanaaca ctggattttt 120
gttcaaatan cctatcaact tggcntctgt gttgcggttg tcacttggta acaaaataag 180
tc 182

<210> 10
<211> 259
<212> DNA

```
<213> Homo sapiens

<220>
<221> unsure
<222> (29)..(29)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (122)..(123)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (146)..(146)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (192)..(193)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (213)..(213)
<223> n = a, c, t, or g

<400> 10
taattgacaa ataaaaattg tatattttnc atatttaaca tgttatgcta acatatatat 60
ggattgtgga atggctaagt cagaaattct tttacattca tatttccata ttatttactt 120
tnngctttaa aaaatatgta aatganaata cttatttttt tcagtgtcac tgccttgata 180
ctttcacatt tnngttacat attatttccc ttncatctaa caaatatata ttgagtttct 240
ataatgtgtc tgacactga                                              259

<210> 11
<211> 195
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (90)..(90)
<223> n = a, c, t, or g

<400> 11
tggtcactgg tgccttattt ggtttgtttg ctgaggtcat atttcctgtg gccttcatgc 60
ttgatttgtt ggagtctagc catgtaaaan tctgttggag tctaggcatt taaaaaatag 120
gtatttattg taatctttgc catttgcttg tttgtatcca tccttcttgg gaaggcttta 180
caggcattca aaagg                                                   195

<210> 12
<211> 656
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (556)..(556)
<223> n = a, c, t, or g
```

<220>
<221> unsure
<222> (566)..(566)
<223> s = g or c

<220>
<221> unsure
<222> (590)..(590)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (610)..(610)
<223> n = a, c, t, or g

<400> 12
gccaacaaac aaaatgaat aagacctggg atgtattttt tggccaaggc aattagaaaa 60
tgattagtat ccttatcagg agcaatttca gagaatgttt gggtggacgt ctaactacag 120
tggagtcaaa cgtgaatcaa cggtgaaaaa aggacaatag ccaatgtgta cacttttat 180
aaaaaccacc ctccaaggac caggcactgg ccctctctcc ggtgcccaca gacatccaca 240
caggcccaaa gaatcaggga ttgcacaagc cagagcaatc gaacggttct gagtcatctg 300
ccggaagcct tgccctcaat caaggcggac gtgaagcatc tacaaaggag gaatagtcaa 360
agcagcagcg gcggcggcgg cggcggcagc agcagcagca gcaggaggtg ggggcctctg 420
ccaggtaccg ggcggggcag gcacggaggt gcccaggttc ccgcggaggc cacctcttcc 480
ctggagtgcg tgagagaggg gaagggagga aggccagagc aggaatcaga gcgaggcaaa 540
ggcgggcagg aactangaga atgacsgcgg gaggcggccg ggaaagaaan tctcggggct 600
gtgggggtcn ccctggcacc agccggggtc ccaagcccca ccgcgagacc ccgcga 656

<210> 13
<211> 22
<212> DNA
<213> Homo sapiens

<400> 13
atcgaacggt tctgagtcat ct 22

<210> 14
<211> 19
<212> DNA
<213> Homo sapiens

<400> 14
cgctctgatt cctgctctg 19

<210> 15
<211> 546
<212> DNA
<213> Homo sapiens

<400> 15
ttcagtagaa ggaagcacag caaatttgcc tttatagaga ttcaattctt ggtgcttggg 60
ccaaagaata agaattacat taagcaggcc gggcacggtg gctcacacct gtaaaaccag 120
aactttggga ggccgaggca ggcagatcat gaggtcagga gatcgagacc atcctggaca 180
acatagtgaa accccatctc tactaaaaat acaaaaatta gccgggcatg gtggtgcatg 240
cctgtaatcc cagctactca ggaggcggag gcaggagaat cccttgaacc agggagttgg 300
aggttgcagt gagccgagat cacgccacag cactctagcc tggcgacaga gtgagactcc 360
atctcaaaaa aaaaaaaaaa aaaaaaaaaa ttacattaag cagcagcagc agcagtgasa 420
gagggaakaa tgaaagaaga aatttctaga ataagattga tctccagcac catgccaatc 480
atggactgga tacaattcat gcatatcttt tgtgagagag gtgagagatg tgaatccttt 540
ctcatt 546

<210> 16
<211> 22
<212> DNA
<213> Homo sapiens

<400> 16
agaaggaagc acagcaaatt tg 22

<210> 17
<211> 20
<212> DNA
<213> Homo sapiens

<400> 17
gcatggtgct ggagatcaat 20

<210> 18
<211> 573
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (28)..(28)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (74)..(74)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (92)..(92)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (97)..(97)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (100)..(100)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (123)..(123)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (132)..(132)
<223> s = g or c

<220>
<221> unsure
<222> (133)..(133)

<223> k = g or t/u

<220>
<221> unsure
<222> (162)..(162)
<223> k = g or t/u

<220>
<221> unsure
<222> (171)..(171)
<223> k = g or t/u

<220>
<221> unsure
<222> (422)..(422)
<223> r = g or a

<220>
<221> unsure
<222> (443)..(443)
<223> k = g or t/u

<220>
<221> unsure
<222> (482)..(482)
<223> s = g or c

<220>
<221> unsure
<222> (551)..(551)
<223> y = t/u or c

<400> 18
```
tgggagttaa agcagacatt cggctttngt gttgccagag ttctaacata agttcttttt 60
catctgggca ggcngatgtt ccttccatct tngaagnacn gtccttttca ttttttttat 120
ttngcttttg gsktttatct tcttagacgt cttcaggagt tkgattgtag kgtaaggcag 180
atttagttga ctgggctttg tttctggaaa attttaaagg ggcaagtcct gggctgcata 240
ttcttactct gggggcttag tactggcccc taaatttgtt ctctggctcc tcaaggttag 300
aaatctgctg gctggagggg ctgagatgtt ccttgactgc tggccagaac attccgccgg 360
ggggtggcaa ccgaagtgtt tctttgggca atggcagcag aattcatgat tgttttcatg 420
trccagcagc agtggcagcg caktgagttg catgattgtt ggctggggct gagtgctggc 480
asgcactgga gtgtttggct tccagtagaa attcacagca gtagtagtgg tggcatggga 540
aggagggcag yggtggcatg gggaggaccc ccc                              573
```

<210> 19
<211> 22
<212> DNA
<213> Homo sapiens

<400> 19
```
ggctgagatg ttccttgact gc                                          22
```

<210> 20
<211> 22
<212> DNA
<213> Homo sapiens

<400> 20
```
ccttcccatg ccaccactac ta                                          22
```

```
<210> 21
<211> 597
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (67)..(67)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (95)..(95)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (151)..(151)
<223> n = a, c, t, or g

<220>
<221> unsure
<222> (425)..(425)
<223> s = g or c

<400> 21
tgtaattccc agcaatttgg ggagcccaag gcgggcagat tcatgagttc gggaagattc 60
gagaccnttc ctggctaaac acgggggaaa ccccnttttt actaaaaaat accaaaaaat 120
taacctgggc gtggtggcgg gccccagcta ntccggaggc tgaggcagga gaatggtgtg 180
aacccgggag gcggagcttg cagtgagccg agatcccgct actgcactcc agcctgggca 240
atagagggag actccgtctc aaaaaaaaaa aaaaataaat aataataaaa aaaataacaa 300
taataatact aataattgct tgatatttta caaaagcaaa aggaaaagaa gactaggcaa 360
gaaaaaaaaa acctccttag atggtagaac tcaggtttaa aattaaaact tattctggtg 420
tcagsctagt tgtatatttt gacctcttta aatgctctga actatgatat ggagtaacag 480
cgatgctgct gctgctgctg ctgctgctga tggtggtggt gttttaatat cgaataaaag 540
ttgtggaaac taaatttcat ttctgccaat taactaagat tgcaaagtta aacatct    597

<210> 22
<211> 22
<212> DNA
<213> Homo sapiens

<400> 22
tttgcaatct tagttaattg gc                                          22

<210> 23
<211> 24
<212> DNA
<213> Homo sapiens

<400> 23
gaactatgat atggagtaac agcg                                        24
```

OIPE JC134
JAN 08 2001
PATENT & TRADEMARK OFFICE

RECEIVED
JAN 16 2001
TECH CENTER 1600/2900

SEQUENCE LISTING

<110> Van Broeckhoven, Christine
Raeymaekers, Peter
Del-Favero, Jurgen

<120> MOOD DISORDER GENE

<130> B0192/7019

<140> U.S. 09/581,500
<141> 2000-06-14

<150> GB 9726804.9
<151> 1997-12-18

<150> PCT/EP98/08543
<151> 1998-12-17

<160> 23

<170> PatentIn Ver. 2.0

<210> 1
<211> 167
<212> DNA
<213> Homo sapiens

<400> 1
gtctttattt catataacta tgctctgatc tttgttactt tctcctttta actcagttta 60
agctttattc ttattttcca gctgctgaag gtatatagtt aggttgttta ttggatacca 120
ttctttcccg ttaatgtcag tggttactgc tatcaatgta gcagtta 167

<210> 2
<211> 122
<212> DNA
<213> Homo sapiens

<400> 2
ataaggtata ttatttgtgt cgtgagttaa gaaatcatta ataactattt tcagaatgac 60
aaatgtcatt atatgttgta aaaaagataa atacgtgaaa ttatgaggtt aagaaaagtt 120
ta
122

<210> 3
<211> 154
<212> DNA
<213> Homo sapiens

<400> 3
acataaaatg tcgctcaaaa acaattatgt gtgtctacac atatgggaaa gcaggaaaca 60
aatttgttta caacatacat tacttttgtt ttttaggcaa gataaaatnt cctacctcca 120
aaaccaccag cacngtccgc aataactata catc 154

<210> 4
<211> 301
<212> DNA
<213> Homo sapiens

<400> 4
aatatcattc ttcacccacg ttatacataa gagaccagaa tgtgatattg tcatctcaca 60
tggaaaaatc tgctgtgatc agttcctgaa gcttgctgtg atcctccctt aggaaagtag 120

```
aaaaatcttt ttgaaacact ttattctaca atcaatgaaa attaggtgaa gctacagaag 180
ccagaaatta ctctaagatt agacaattat ttaagangac caattgtctt tggtcttctt 240
ctgaagggtc tgactaccct cctccaaaga attcactggc cgtcgtttta caacgtcntg 300
a                                                                 301

<210> 5
<211> 191
<212> DNA
<213> Homo sapiens

<400> 5
ggagggtgtt ntcacanaag tctggggtgc gctgtgttgt tcattgtaaa aaccctttgg 60
ancatctggg aatgtgctgc cccacatgtc caggtaacgt tctcaggaag gggaggctgg 120
aaatctctgt gtgttcttac aggaatgcat gaaatctccc ancccctctt gttggaaatt 180
tccctcactt t                                                      191

<210> 6
<211> 253
<212> DNA
<213> Homo sapiens

<400> 6
cttctcnatg antggacaaa tgtcattggg tcagcatgag gcacagctta ccagttcaga 60
ttccagtagc tgaggaacaa atcttaactc caaaaataag taattgcgtc actttggagg 120
aattatttga ccttttcata actttgacat cacaacaatg agggtgaagt tagtaaaata 180
aatgattatt atgaggataa aatgagaaaa tgaattnagt gcttaagaca atgcttggta 240
actagttaan ccg                                                    253

<210> 7
<211> 153
<212> DNA
<213> Homo sapiens

<400> 7
ggtntttcac ttggttggtt aacattactt ctaagttttt tattgttttt tatgctattg 60
ctaatgggat tgctttctta atttattttt tccaatagct tgttgttagt ttatatcaaa 120
tgcaactgtt tttctatgca aattatgttt cct                              153

<210> 8
<211> 238
<212> DNA
<213> Homo sapiens

<400> 8
ttggtggtgc cctaggtttg gcaattataa ataaagctgc tacaaacatt catgtgcagg 60
tctccgtgtg gacataattt tccagttcat ttgggtaaaa cccaagggag cacaactgtt 120
ggatcctatn ataaaaatat ntctcgtttc atttaaaaaa cctgggaaac tatctnccca 180
cagtggctgt cccttttgt atccccacca acaatgttgg aaagcctatt gccancat   238

<210> 9
<211> 182
<212> DNA
<213> Homo sapiens

<400> 9
catgnctcac agtgttctga ggctgctctg gacatgcaat cttgcatgct tttgtcatga 60
caggtcttaa anagtttatc agcttnctca aatagctgaa tgacanaaca ctggattttt 120
gttcaaatan cctatcaact tggcntctgt gttgcggttg tcacttggta acaaaataag 180
tc                                                                182

<210> 10
```

<211> 259
<212> DNA
<213> Homo sapiens

<400> 10
taattgacaa ataaaaattg tatattttnc atatttaaca tgttatgcta acatatatat 60
ggattgtgga atggctaagt cagaaattct tttacattca tatttccata ttatttactt 120
tnngctttaa aaaatatgta aatganaata cttatttttt tcagtgtcac tgccttgata 180
ctttcacatt tnngttacat attatttccc ttncatctaa caaatatata ttgagtttct 240
ataatgtgtc tgacactga 259

<210> 11
<211> 195
<212> DNA
<213> Homo sapiens

<400> 11
tggtcactgg tgccttattt ggtttgtttg ctgaggtcat atttcctgtg gccttcatgc 60
ttgatttgtt ggagtctagc catgtaaaan tctgttggag tctaggcatt taaaaaatag 120
gtatttattg taatctttgc catttgcttg tttgtatcca tccttcttgg gaaggcttta 180
caggcattca aaagg 195

<210> 12
<211> 656
<212> DNA
<213> Homo sapiens

<400> 12
gccaacaaac aaaatgaaat aagacctggg atgtattttt tggccaaggc aattagaaaa 60
tgattagtat ccttatcagg agcaatttca gagaatgttt gggtggacgt ctaactacag 120
tggagtcaaa cgtgaatcaa cggtgaaaaa aggacaatag ccaatgtgta cactttttat 180
aaaaaccacc ctccaaggac caggcactgg ccctctctcc ggtgcccaca gacatccaca 240
caggcccaaa gaatcaggga ttgcacaagc cagagcaatc gaacggttct gagtcatctg 300
ccggaagcct tgccctcaat caaggcggac gtgaagcatc tacaaaggag gaatagtcaa 360
agcagcagcg gcggcggcgg cggcggcagc agcagcagca gcaggaggtg ggggcctctg 420
ccaggtaccg ggcggggcag gcacggaggt gcccaggttc ccgcggaggc cacctcttcc 480
ctggagtgcg tgagagaggg gaagggagga aggccagagc aggaatcaga gcgaggcaaa 540
ggcgggcagg aactaxgaga atgacsgcgg gaggcggccg ggaaagaaax tctcggggct 600
gtgggggtcx ccctggcacc agccggggtc ccaagcccca ccgcgagacc ccgcga 656

<210> 13
<211> 22
<212> DNA
<213> Homo sapiens

<400> 13
atcgaacggt tctgagtcat ct 22

<210> 14
<211> 19
<212> DNA
<213> Homo sapiens

<400> 14
cgctctgatt cctgctctg 19

<210> 15
<211> 546
<212> DNA
<213> Homo sapiens

```
<400> 15
ttcagtagaa ggaagcacag caaatttgcc tttatagaga ttcaattctt ggtgcttggg 60
ccaaagaata agaattacat taagcaggcc gggcacggtg gctcacacct gtaaaaccag 120
aactttggga ggccgaggca ggcagatcat gaggtcagga gatcgagacc atcctggaca 180
acatagtgaa accccatctc tactaaaaat acaaaaatta gccgggcatg gtggtgcatg 240
cctgtaatcc cagctactca ggaggcggag gcaggagaat cccttgaacc agggagttgg 300
aggttgcagt gagccgagat cacgccacag cactctagcc tggcgacaga gtgagactcc 360
atctcaaaaa aaaaaaaaaa aaaaaaaaaa ttacattaag cagcagcagc agcagtgasa 420
gagggaakaa tgaaagaaga aatttctaga ataagattga tctccagcac catgccaatc 480
atggactgga tacaattcat gcatatcttt tgtgagagag gtgagagatg tgaatccttt 540
ctcatt                                                            546

<210> 16
<211> 22
<212> DNA
<213> Homo sapiens

<400> 16
agaaggaagc acagcaaatt tg                                           22

<210> 17
<211> 20
<212> DNA
<213> Homo sapiens

<400> 17
gcatggtgct ggagatcaat                                              20

<210> 18
<211> 573
<212> DNA
<213> Homo sapiens

<400> 18
tgggagttaa agcagacatt cggctttngt gttgccagag ttctaacata agttcttttt 60
catctgggca ggcngatgtt ccttccatct tngaagnacn gtccttttca tttttttat 120
ttngcttttg gsktttatct tcttagacgt cttcaggagt tkgattgtag kgtaaggcag 180
atttagttga ctgggctttg tttctggaaa attttaaagg ggcaagtcct gggctgcata 240
ttcttactct gggggcttag tactggcccc taaatttgtt ctctggctcc tcaaggttag 300
aaatctgctg gctggagggg ctgagatgtt ccttgactgc tggccagaac attccgccgg 360
ggggtggcaa ccgaagtgtt tctttgggca atggcagcag aattcatgat tgttttcatg 420
trccagcagc agtggcagcg caktgagttg catgattgtt ggctggggct gagtgctggc 480
asgcactgga gtgtttggct tccagtagaa attcacagca gtagtagtgg tggcatggga 540
aggagggcag yggtggcatg gggaggaccc ccc                               573

<210> 19
<211> 22
<212> DNA
<213> Homo sapiens

<400> 19
ggctgagatg ttccttgact gc                                           22

<210> 20
<211> 22
<212> DNA
<213> Homo sapiens

<400> 20
ccttcccatg ccaccactac ta                                           22
```

<210> 21
<211> 597
<212> DNA
<213> Homo sapiens

<400> 21
tgtaattccc agcaatttgg ggagcccaag gcgggcagat tcatgagttc gggaagattc 60
gagaccnttc ctggctaaac acgggggaaa ccccnttttt actaaaaaat accaaaaaat 120
taacctgggc gtggtggcgg gccccagcta ntccggaggc tgaggcagga gaatggtgtg 180
aacccgggag gcggagcttg cagtgagccg agatcccgct actgcactcc agcctgggca 240
atagagggag actccgtctc aaaaaaaaaa aaaaataaat aataataaaa aaaataacaa 300
taataatact aataattgct tgatatttta caaaagcaaa aggaaaagaa gactaggcaa 360
gaaaaaaaaa acctccttag atggtagaac tcaggtttaa aattaaaact tattctggtg 420
tcagsctagt tgtatatttt gacctcttta aatgctctga actatgatat ggagtaacag 480
cgatgctgct gctgctgctg ctgctgctga tggtggtggt gttttaatat cgaataaaag 540
ttgtggaaac taaatttcat ttctgccaat taactaagat tgcaaagtta aacatct 597

<210> 22
<211> 22
<212> DNA
<213> Homo sapiens

<400> 22
tttgcaatct tagttaattg gc 22

<210> 23
<211> 24
<212> DNA
<213> Homo sapiens

<400> 23
gaactatgat atggagtaac agcg 24